



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.				
10/022,144	12/13/2001	Kai Narvanen	324-010673-US(PAR)	2773				
2512 PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824	7590 07/02/2007		<table border="1"><tr><td>EXAMINER</td></tr><tr><td>JAIN, RAJ K</td></tr></table>		EXAMINER	JAIN, RAJ K		
EXAMINER								
JAIN, RAJ K								
			<table border="1"><tr><td>ART UNIT</td><td>PAPER NUMBER</td></tr><tr><td>2616</td><td></td></tr></table>	ART UNIT	PAPER NUMBER	2616		
ART UNIT	PAPER NUMBER							
2616								
			<table border="1"><tr><td>MAIL DATE</td><td>DELIVERY MODE</td></tr><tr><td>07/02/2007</td><td>PAPER</td></tr></table>	MAIL DATE	DELIVERY MODE	07/02/2007	PAPER	
MAIL DATE	DELIVERY MODE							
07/02/2007	PAPER							

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/022,144

Applicant(s)

NARVANEN ET AL.

Examiner

Raj K. Jain

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 1/3/07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8 and 10 is/are rejected.
- 7) ☒ Claim(s) 3 and 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

Claims 7 and 9 are objected to because of the following informalities: The claims recite "adaptation functions" in line 2 and 4 respectively, this does not limit the scope of the claim, suggest rewording. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rautioal et al (US005949775A) in view of Behan (USP 6,442,401 B1).

Regarding claims 1, 8 and 10, Rautioal discloses a telecommunications system (see Fig. 2) which comprises an office network (office network 3 dashed line with users 4a, 6, 8 and 10), an operator network (the MSC, serves as the operator network from a cellular environment to the office network system interface 2) and a local area network (LAN dark line) between them, wherein the office network comprises

at least one mobile system terminal 5 (Fig. 2), a base transceiver station 4, a radio access gateway 1 controlling the base transceiver station and having a functional connection with the local area network and configured to adapt the data transmission protocols of said mobile system and local area network to each other (The gateway

Art Unit: 2616

computer 1 shown in the figure acts as a link between the local area network LAN and a mobile switching centre MSC. The interface 2 between the gateway computer 1 and the mobile switching centre MSC complies with the same A-interface standard that defines communication between ordinary base station controllers BSC and a mobile switching centre MSC, and therefore, from the point of view of the switching centre, the gateway computer 1 is just as any base station controller see col 5 lines 50-63.); and an

operator network comprises adaptation functions for adapting data transmission from the office network through the local area network at least to the data transmission protocol according to said mobile system and used by the public land mobile network (The interface 2 between the gateway computer and the MSC or the cellular operator network is the interface from corporate network to the operator network. The interface 2 serves as protocol conversion tasks being transferred from the mobile switching centre MSC to the gateway computer 1. From the point of view of the switching centre all communication operations occurring under the control of the gateway computer 1 occur in a certain location area 3 corresponding to the office in question. It could also be said that from the point of view of the switching centre the systems operating under the gateway computer constitute a base station subsystem (BSS), see col 6 lines 1-9.).

Rautioal fails to disclose a serving support node, packet control unit and gateway support node.

Behan discloses a serving support node 162 (Fig. 1), packet control unit 160 and gateway support node 164, which are configured to support the packet data protocol.

GPRS services provide independent current circuit switched services, and utilize unused resources of circuit switched traffic and provide predictability and control of its mobile users so that no two users have the same IP address that share the same LAN interface. Thus employing the GPRS system as an interface to office network and a LAN connection would allow a greater degree of control and predictability of IP addressing among its mobile users and avoiding IP address conflict.

Thus it would have been obvious at the time the invention was made to modify the teachings of Rautioal and incorporate a GPRS services in between the office network and the LAN interface so as to have greater degree of control and predictability of IP addressing among its mobile users and avoiding IP address conflict.

Regarding claim 2, Rautioal discloses a mobile station (Fig. 2, ref. 5) configured to support the packet data protocol of said mobile system (see col 3 lines 35-65, the radio interface in the office network is substantially similar to the radio interface of a conventional public cellular radio network and therefore the mobile 5 would provide support to the packet data protocol). Rautioal fails to disclose a serving support node, packet control unit and gateway support node which are configured to support the packet data protocol. Behan discloses a serving support node 162 (Fig. 1), packet control unit 160 and gateway support node 164, which are configured to support the packet data protocol. Reasons for combining same as above for claim 1.

Regarding claims 4 and 5, Behan discloses a serving support node 162 (Fig. 1), packet control unit 160 and gateway support node 164, which are configured to support the packet data protocol. Reasons for combining same as above for claim 1.

Regarding claim 7, Rautioal discloses an adaptation function in the operator network for adapting a packet data connection from the office network through the local area network at least to the packet data protocol used by the public land mobile network (The gateway computer 1 shown in the figure acts as a link between the local area network LAN and a mobile switching centre MSC. The interface 2 between the gateway computer 1 and the mobile switching centre MSC complies with the same A-interface standard that defines communication between ordinary base station controllers BSC and a mobile switching centre MSC.). Rautioal specifically fails to disclose a packet data connection between a serving support node or a gateway support node. Behan discloses a serving support node 162 (Fig. 1), packet control unit 160 and gateway support node 164, which are configured to support the packet data protocol. Reasons for combining same as above for claim 1.

Claims 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rautioal et al (US005949775A) in view of view of Behan (USP 6,442,401 B1) further in view of Jiang et al (US006741853B1).

Rautioal and Behan fail to disclose a gateway support node connection to the DHCP server within its invention.

Jiang discloses a data transmission connection (See Fig. 7) configured from the gateway support node to a DHCP server for dynamically defining the IP addresses of 25 mobile stations (The gateway support node 730 the wireless portal middleware connects to various servers one being the DHCP server 744 for dynamic IP address

Art Unit: 2616

allocation, see col 9 lines 19-25. Dynamically allocating IP addresses to mobile terminals (MT) in a GPRS network prevents IP address conflicts and provides addresses that are usable to MTs running real-time applications such as VoIP. Thus it would have been obvious at the time the invention was made to modify the teachings of Rautio and incorporate a GPRS services inbetween the office network and the LAN interface so as to have greater degree of control and predictability of IP addressing among it mobile users.

#### ***Allowable Subject Matter***

Claims 3 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raj K. Jain whose telephone number is 571-272-3145. The examiner can normally be reached on M-F.

Art Unit: 2616

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

***Raj K. Jain***  
***/Raj K. Jain/***

***Art Unit 2616***

***June 25, 2007***